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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,696	10/23/2003	Clifton W. Wood JR.	MI40-364	3582
21567	7590	09/13/2005	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			NGUYEN, BRIAN D	
			ART UNIT	PAPER NUMBER
			2661	
DATE MAILED: 09/13/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,696

Applicant(s)

WOOD ET AL.

Examiner

Brian D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-17, 22, 23, 30-34, 36 and 37 is/are allowed.
- 6) ☒ Claim(s) 1, 6, 18-21, 24-29, 35 and 39-75 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/23/03 & 1/26/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The applicant is requested to update the status of all patent applications mentioned in the specification.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The term “modulator” in claims 6, 21, and 26.

Claim Objections

2. Claims 1, 34, 38, 42, 49-57, and 67 are objected to because of the following informalities:

Claim 1, line 10, it is suggested to delete “,” between “identification” and “devices”.

Claim 34, line 15, it is suggested to change “possible group or random values” to -- possible group of random values--.

Claim 38, line 11, it is suggested to change “possible group or random values” to -- possible group of random values--.

Claim 42, it is suggested to change “the tree search scheme” to --a tree search scheme--.

Claims 49-57, claims 49-57 seems to be claiming a computer-readable medium comprising instructions that, when executed, cause an interrogator to perform a method including steps described in claims 49-57. If this is true, it is suggested to change claim 49, lines 1-2 from “An interrogator comprising instructions that, when executed, cause the interrogator to perform a method comprising:” to -- An computer-readable medium comprising instructions that, when executed, cause an interrogator to perform a method comprising:--. Claims 50-57, line 1, change

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from "The interrogator" to --the computer-readable medium--. Note that claims 49-57 cannot be apparatus claims because an apparatus claim must include a structure and cannot be a single mean claim.

Claim 67, line 6, it is suggested to change "the tree search" to --a tree search--.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 18-21, 24-29, 35, 39-57, and 73-74 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites the limitation "the determined maximum possible number" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim. "the determined maximum possible number" seems to refer back to "determining the maximum possible number" in lines 3-4 of claim 17. If this is true, it is suggested to change the dependency of claim 18 from claim 16 to claim 17.

Claims 19 and 20 have the same problem as claim 18.

Claim 21 recites the limitation "the wireless identification device" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim. "the wireless identification device" seems to refer back to "wireless communication devices" in lines 4-5 of claim 17. If this is true, it is suggested to change the dependency of claim 18 from claim 16 to claim 17.

Claim 24 recites the limitation "the different wireless identification devices" in line 8 and "the multiple wireless identification devices" in line 11. There are insufficient antecedent basis for these limitations in the claim.

Claim 27 recites the limitation "the receiver" in line 11. There are insufficient antecedent basis for these limitations in the claim.

Claim 35, lines 2-3, "store the predetermined number" is unclear if the applicant is referring to a first, a second or both predetermined numbers described in claim 34.

Claim 39 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the step(s) between the using and starting steps in which the information, for example the identification number, obtained from the step of using is used to perform the starting step. In other words, the step of using and starting are not correlated.

Claims 49 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the step(s) between the transmitting and starting steps in which the information, for example the identification, obtained from the first request is used to perform the starting step. In other words, the step of using and starting are not correlated.

Claims 50 and 52 recite the limitation "the tree search scheme" in line 3 of claim 50 and line 2 of claim 52. There are insufficient antecedent basis for these limitations in the claim.

Claim 53 recites the limitation "the reply" in line 1. There is insufficient antecedent basis for this limitation in the claim. "the reply" seems to refer back to "a reply" in line 2 of claim 51. If this is true, it is suggested to change the dependency of claim 53 from claim 50 to claim 51.

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Claims 55 and 56 recite the limitation "the plurality of RFID devices" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 73 recites the limitation "the collision detection circuit" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. "the collision detection circuit" seems to refer back to "a collision diction circuit" in line 1 of claim 69. If this is true, it is suggested to change the dependency of claim 73 from claim 67 to claim 69.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-75 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-41 of U.S. Patent No. 6,118,789. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are directed towards the same invention.

Claim Rejections - 35 USC § 102

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7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 6, 24-26, 39-46, 49-54, 58-59, 61-64, 67, 69-72, and 75 are rejected under 35 U.S.C. 102(b) as being anticipated by Snodgrass (5,583,850).

Regarding claims 1 and 24-25, Snodgrass discloses a method and system of establishing wireless communications between an interrogator and individual ones of multiple wireless identification devices, the wireless identification devices having respective identification numbers and being addressable by specifying identification numbers with any one of multiple possible degrees of precision, the method comprising utilizing a tree search in an arbitration scheme to determine a degree of precision necessary to establish one-on-one communications between the interrogator and individual ones of the multiple wireless identification devices, a search tree being defined for the tree search method, the tree having multiple selectable levels respectively representing subgroups of the multiple wireless identification devices, the level at which a tree search starts being variable the method further comprising starting the tree search at any selectable level of the search tree (see abstract; figure 12; and col. 13, lines 42-48 where Snodgrass teaches of the commander station begins a tree search by specifying a group of responder station addresses by selecting values for BRANCH and MASK. Figure 12 show different levels of the search tree. Note that when the commander station specifies BRANCH = 000 and MASK = 001, then the tree search will start at level 2, BRANCH 000).

Regarding claims 6 and 26, Snodgrass discloses integrated circuit includes a receiver, a modulator, and a microprocessor (see col. 8, lines 32-36 and col. 22, lines 38-49).

Regarding claims 39-41, Snodgrass discloses a method using a tree search (see figure 12) to determine an identification number of one of a plurality of wireless identification devices (responder stations), a search tree being defined for the tree search; and starting the tree search at a selectable level (level 1 or a level further down the search tree) of the search tree (see col. 13, lines 42-48 where Snodgrass teaches of the commander station begins a tree search by specifying a group of responder station addresses by selecting values for BRANCH and MASK. Figure 12 show different levels of the search tree. Note that when the commander station specifies BRANCH = 000 and MASK = 001, then the tree search will start at level 2, BRANCH 000).

Regarding claims 42-44, Snodgrass discloses skipping the level in response to detecting a collision in a reply (see col. 18, lines 11-26).

Regarding claims 45-46, Snodgrass discloses identification number and an arbitration number (see col. 4, lines 1-25).

Regarding claim 49, Snodgrass discloses a method comprises transmitting a first request for identification, in a accordance with a tree search to a first subgroup of RFID devices associated with a first branch at a first level of a search tree; and starting the tree search at a level other than levels 0 and 1 of the tree search (see col. 13, lines 42-48 where Snodgrass teaches of the commander station begins a tree search by specifying a group of responder station addresses by selecting values for BRANCH and MASK. Figure 12 show different levels of the search tree. Note that when the commander station specifies BRANCH = 000 and MASK = 001, then the tree search will start at level 2, BRANCH 000).

Regarding claims 50-52, Snodgrass discloses skipping the level in response to detecting a collision in a reply (see col. 18, lines 11-26).

Regarding claims 53-54, Snodgrass discloses identification number and an arbitration number (see col. 4, lines 1-25).

Regarding claims 58-59, 63-64, 67, 70-72, Snodgrass discloses a method and apparatus comprising: affixing a RFID device to an object for tracking and to identify the object, the RFID device to store an identification number, sending a first signal from an interrogator to the object, the first signal indicating a first subgroup at a first level of a search tree in accordance with a tree search; starting the tree search at a selectable level of the search tree; determining the identification number stored in the RFID device; and associating the identification number with the object (see abstract; figure 12; col. 13, lines 42-48 where Snodgrass teaches of the commander station begins a tree search by specifying a group of responder station addresses by selecting values for BRANCH and MASK. Figure 12 show different levels of the search tree. Note that when the commander station specifies BRANCH = 000 and MASK = 001, then the tree search will start at level 2, BRANCH 000).

Regarding claims 61-62, 69, 75, Snodgrass discloses skipping the level in response to detecting a collision in a reply (see col. 18, lines 11-26).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 47-48, 55-57, 65-66, and 73-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snodgrass in view of Gardner et al (6,038,455).

Regarding claims 47-48, 55-57, 65-66, and 73-74, Snodgrass does not specifically disclose the use of Aloha scheme. However, the use of Aloha scheme is a matter of choice and well known in the art. Gardner discloses the use of Aloha scheme. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Aloha scheme as taught by Gardner in the system of Snodgrass in order to minimize packet collision.

11. Claims 60 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snodgrass.

Regarding claims 60 and 68, Snodgrass does not specifically disclose the selectable level is manually selected. However, to select a level manually is a matter of choice. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a level manually in order to give the operator more control over the selecting of level.

Allowable Subject Matter

12. Claims 7-17, 22-23, 30-34, and 36-37 are allowed.

13. Claims 2-5, 18-21, 27-29, 35, 38 would be allowable if rewritten to overcome the objection(s) and/or rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Conclusion

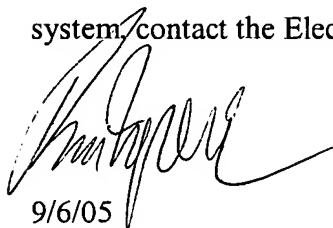
14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chandra et al (6,216,132) and Canale et al (5,619,648).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



9/6/05

**BRIAN NGUYEN
PRIMARY EXAMINER**